

KBR:iar 01/05/04 235783  
Attorney Reference Number 1011-67363  
PATENT

EXPRESS MAIL LABEL NO. EV331580745US  
DATE OF DEPOSIT: January 5, 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**In re application of:** Waters et al.

**Application No.** Not yet assigned

**Filed:** January 5, 2004

**Confirmation No.** --

**For:** STRUCTURED ALGORITHMIC  
PROGRAMMING LANGUAGE  
APPROACH TO SYSTEM DESIGN

**Examiner:** --

**Art Unit:** --

**Attorney Reference No.** 1011-67363

MAIL STOP PATENT APPLICATION  
COMMISSIONER FOR PATENTS  
P.O. BOX 1450  
ALEXANDRIA, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**  
**FOR CONTINUING APPLICATIONS**

Listed on the accompanying form PTO-1449 are several English-language documents. Applicants respectfully request that such documents be listed as references cited on the issued patent.

The present application relies upon U.S. Patent Application No. 09/957,442, which was filed September 18, 2001, for an earlier filing date under 35 U.S.C. § 120. Furthermore, documents listed on the accompanying form PTO-1449 were disclosed to or cited by the Patent Office in the earlier U.S. application, and were considered in the parent application. Copies of the documents listed on the accompanying form PTO-1449 need not be sent to the Patent Office pursuant to 37 C.F.R. § 1.98. However, applicants will furnish the Patent Office with such copies upon request.

KBR:iar 01/05/04 235783  
Attorney Reference Number 1011-67363  
PATENT

EXPRESS MAIL LABEL NO. EV331580745US  
DATE OF DEPOSIT: January 5, 2004

Please charge any additional fees that may be required in connection with filing this  
Information Disclosure Statement, or credit any overpayment, to Deposit Account No. 02-4550.

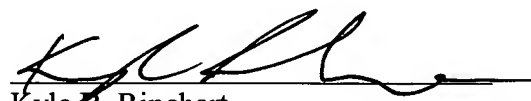
A duplicate copy of this sheet is enclosed.

The filing of this Information Disclosure Statement shall not be construed to be an  
admission that the information cited in the statement is, or is considered to be, prior art or  
otherwise material to patentability as defined in 37 C.F.R. §1.56.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

By

  
Kyle B. Rinehart  
Registration No. 47,027

One World Trade Center, Suite 1600  
121 S.W. Salmon Street  
Portland, Oregon 97204  
Telephone: (503) 226-7391  
Facsimile: (503) 228-9446

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>	<b>Attorney Docket Number</b>	1011-67363
	<b>Application Number</b>	Not yet assigned
	<b>Filing Date</b>	
	<b>First Named Inventor</b>	Waters
	<b>Art Unit</b>	--
	<b>Examiner Name</b>	--

### U.S. PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Number	Date	Name
		6,053,947	4.25.2000	Parson
		6,226,776	5.1.2001	Panchul et al.
		6,457,164	9.24.2002	Hwang et al.
		6,484,177	11.19.2002	Van Huben et al.
		6,584,601	6.24.2003	Kodosky et al.

Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
		Ade et al., "Hardware-Software Codesign with GRAPE," <i>Proceedings of the Sixth IEEE International Workshop on Rapid System Prototyping</i> , pp. 40-47 (June 1995).
		Elliott, J.P., <u>Understanding Behavioral Synthesis</u> , "Table of Contents," "Chapter 2: An Introduction to Behavioral Synthesis," "Chapter 3: The Behavioral Synthesis Process," "Chapter 4: Data Types," "Chapter 5: Entities, Architectures, and Processes," "Chapter 10: Functions, Procedures, and Packages," "Chapter 12: Reusable Test Benches," "Chapter 13: Coding for Behavioral Synthesis," "Index," Kluwer Academic Publishers Group, pp. v-xiv, 5-23, 25-40, 41-55, 57-76, 173-180, 197-211, 213-243, 313-319 (1999).
		"Monet Interactive Architectural Exploration Through Behavioral Design," 3pp. [Downloaded from the World Wide Web on February 6, 2001.].
		"Monet Technical Papers," 1p. [Downloaded from the World Wide Web on February 6, 2001.].
		Elliott, J., <u>An Introduction to Architectural Exploration</u> , "Part I: Introduction & Terminology," 8pp. (March 1998).
		Elliott, J., <u>An Introduction to Architectural Exploration</u> , "Part II: I/O Modes," 12pp. (April 1998).

EXAMINER SIGNATURE:	DATE CONSIDERED:
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<b>Attorney Docket Number</b>	1011-67363
		<b>Application Number</b>	Not yet assigned
		<b>Filing Date</b>	
		<b>First Named Inventor</b>	Waters
		<b>Art Unit</b>	--
		<b>Examiner Name</b>	--
<b>Examiner's Initials*</b>	<b>Cite No. (optional)</b>	<b>OTHER DOCUMENTS</b>	
		Elliott, J., <u>An Introduction to Architectural Exploration</u> , "Part III: Loops," 8pp. (April 1998).	
		Elliott, J., <u>An Introduction to Architectural Exploration</u> , "Part IV: Handshaking," 4pp. (April 1998).	
		Elliott, J., <u>An Introduction to Architectural Exploration</u> , "Part V: Reusable Test Benches," 8pp. (April 1998).	
		Wayne Wolf, "Object-Oriented Co-Synthesis of Distributed Embedded Systems," Proc. ASP-DAC '95, pp. 553-558 (1995).	
		Lipton et al., "PDL++: An Optimizing Generator Language for Register Transfer Design," IEEE International Symposium on Circuits and Systems, pp. 1135-1138 (1990).	
		Liao et al., "An Efficient Implementation of Reactivity for Modeling Hardware in the Scenic Design Environment," Proc. DAC '97, 6 pp. (1997).	
		De Micheli et al., "The Olympus Synthesis System," IEEE Design & Test of Computers, Vol. 7, Issue 5, pp. 37-53 (October 1990).	
		Zhu et al., "Syntax and Semantics of the SpecC Language," Proc. Workshop on Synthesis and System Integration of Mixed Technologies, 8 pp. (December 1997).	
		Guido Arnout, "SystemC Standard," Proc. DAC '00, pp. 573-577 (2000).	
		Semeria et al., "Methodology for Hardware/Software Co-verification in C/C++," Proc. DAC '00, pp. 405-408 (2000).	
		Miscellaneous Web pages printed from CynApps World Wide Web site, 28 pp. [Downloaded from the World Wide Web on September 14, 2001.]	
		CynApps, "CynLib™ Language Reference Manual," Cynlib Release 1.4.0, 90 pp. [Downloaded from the World Wide Web on September 14, 2001.]	
		CynApps, "CynLib Users Manual," Cynlib Release Version 1.4.0, 120 pp. [Downloaded from the World Wide Web on September 14, 2001.]	
		John Sanguinetti, "Bridging the Gap with Cynthesis," 6 pp. [Downloaded from the World Wide Web on September 14, 2001.]	

<b>EXAMINER SIGNATURE:</b>	<b>DATE CONSIDERED:</b>
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<b>Attorney Docket Number</b>	1011-67363
		<b>Application Number</b>	Not yet assigned
		<b>Filing Date</b>	
		<b>First Named Inventor</b>	Waters
		<b>Art Unit</b>	--
		<b>Examiner Name</b>	--
<b>Examiner's Initials*</b>	<b>Cite No. (optional)</b>	<b>OTHER DOCUMENTS</b>	
		Andy Goodrich, "Design by Successive Elaboration," 12 pp. [Downloaded from the World Wide Web on September 14, 2001.]	
		Svarstad et al., "A Model for Describing Communication between Aggregate Objects in the Specification and Design of Embedded Systems," 9 pp. [Downloaded from the World Wide Web on November 4, 2001.]	
		Mueller et al., "The Simulation Semantics of SystemC," 7 pp. [Downloaded from the World Wide Web on November 4, 2001.]	
		Siegmond et al., "SystemC <sup>SP</sup> : An Extension of SystemC for Mixed Multi-Level Communication Modeling and Interface-Based System Design," 7 pp. [Downloaded from the World Wide Web on November 4, 2001.]	
		Economakos et al., "Behavioral Synthesis with SystemC," 5 pp. [Downloaded from the World Wide Web on November 4, 2001.]	
		Charest et al., "A Methodology for Interfacing Open Source SystemC with a Third Party Software," 5 pp. [Downloaded from the World Wide Web on November 4, 2001.]	
		Fin et al., "SystemC: A Homogenous Environment to Test Embedded Systems," 6 pp. [Downloaded from the World Wide Web on November 4, 2001.]	
		Fin et al., "The Use of SystemC for Design Verification and Integration Test of IP-Cores," 5 pp. [Downloaded from the World Wide Web on November 4, 2001.]	
		Agliada et al., "On the Reuse of VHDL Modules into SystemC Designs," 5 pp. [Downloaded from the World Wide Web on November 4, 2001.]	
		Fin et al., "AMLETO: A Multi-language Environment for Functional Test Generation," 8 pp. [Downloaded from the World Wide Web on November 4, 2001.]	
		Heinz-Josef Schlebusch, "Converging SystemC with VSIA System-Level Data Types," VSIA Member Meeting, VSIA Alliance, 16 pp. (March 13, 2001). [Downloaded from the World Wide Web on November 4, 2001.]	
		Stuart Swan, "An Introduction to System Level Modeling in SystemC 2.0," Open SystemC Initiative, 13 pp. (May 2001). [Downloaded from the World Wide Web on November 4, 2001.]	

<b>EXAMINER SIGNATURE:</b>	<b>DATE CONSIDERED:</b>
<p>* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>	

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<b>Attorney Docket Number</b>	1011-67363
		<b>Application Number</b>	Not yet assigned
		<b>Filing Date</b>	
		<b>First Named Inventor</b>	Waters
		<b>Art Unit</b>	--
		<b>Examiner Name</b>	--
<b>Examiner's Initials*</b>	<b>Cite No. (optional)</b>	<b>OTHER DOCUMENTS</b>	
		Thomas Komarek, "C Based System Level Design," 60 pp. [Downloaded from the World Wide Web on November 4, 2001.]	
		Bollano et al., "SystemC's Impact on the Development of IP Libraries," IP2000 Europe Conference, 9 pp. (October 2000). [Downloaded from the World Wide Web on November 4, 2001.]	
		Heinz-Josef Schlebusch, "C-based Design of Systems-on-Chip: An EDA Perspective," 45 pp. [Downloaded from the World Wide Web on November 4, 2001.]	
		Gerlach et al., "System Level Design Using the SystemC Modeling Platform," 5 pp. [Downloaded from the World Wide Web on November 4, 2001.]	
		Kranen et al., "Open SystemC Initiative," SystemC Users Forum, DAC - June 2000, 74 pp. [Downloaded from the World Wide Web on November 4, 2001.]	
		Transmodeling, Inc., "Systems to HDL Incrementally, SystemC" 7 pp. (April 2000). [Downloaded from the World Wide Web on November 4, 2001.]	
		"Modeling A 3D Graphics Pipeline with SystemC," ST Microelectronics, Advanced System Technology, SNUG, 7 pp. (March 15, 2000). [Downloaded from the World Wide Web on November 4, 2001.]	
		"Overview of the Open SystemC Initiative," 2 pp. [Downloaded from the World Wide Web on November 4, 2001.]	
		Karen Bartleson, "A New Standard for System-Level Design," Synopsys, 6 pp. (September 1999). [Downloaded from the World Wide Web on November 4, 2001.]	
		Jamison et al., "Connecting the Value Chain with SystemC," 4 pp. (September 1999). [Downloaded from the World Wide Web on November 4, 2001.]	
		Guido Arnout, "C for System Level Design," 4 pp. [Downloaded from the World Wide Web on November 4, 2001.]	
		Gerstlauer et al., "SpecC System-Level Design Methodology Applied to the Design of a GSM Vocoder," Proc. Ninth Workshop on Synthesis and System Integration of Mixed Technologies, Kyoto, Japan, 8 pp. (April 2000).	

<b>EXAMINER SIGNATURE:</b>	<b>DATE CONSIDERED:</b>
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<b>Attorney Docket Number</b>	1011-67363
		<b>Application Number</b>	Not yet assigned
		<b>Filing Date</b>	
		<b>First Named Inventor</b>	Waters
		<b>Art Unit</b>	--
		<b>Examiner Name</b>	--
<b>Examiner's Initials*</b>	<b>Cite No. (optional)</b>	<b>OTHER DOCUMENTS</b>	
		Andreas Gerstlauer, "SpecC, Center for Embedded Computer Systems," 3 pp. [Downloaded on November 4, 2001].	
		Dömer et al., "The SpecC Language Reference Manual," Technical Report ICS-98-13, Dept. Information and Computer Science, University of California, Irvine, 65 pp. (1998).	
		Gerstlauer et al., "VHDL+/SpecC Comparisons - A Case Study," Technical Report ICS-98-23, Dept Information and Computer Science, University of California, Irvine, 40 pp. (1998).	
		Dömer et al., "SpecC Language Reference Manual," Version 1.0, 88 pp. (March 6, 2001).	
		Doemer, "SpecC Language Reference Manual, V1.0," Release Notes, 3 pp. (March 2001).	
		Rumbaugh, James et al., <u>Object-Oriented Modeling and Design</u> , "Copyright Page," "Table of Contents," "Chapter 1: Introduction," and "Index," Prentice-Hall, Inc., pp. ii, iii-viii, 1-14, and 491-500 (1991).	
		Shlaer, Sally et al., <u>Object Lifecycles: Modeling the World in States</u> , "Copyright Page," "Table of Contents," "Chapter 1: Overview of Object-Oriented Analysis," and "Index," Prentice-Hall, Inc., pp. iv, v-viii, 1-9, and 245-251 (1992).	

<b>EXAMINER SIGNATURE:</b>	<b>DATE CONSIDERED:</b>
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.	